



Reliability of reports of childhood trauma in bipolar disorder: A test–retest study over 18 months

Shannon, C., Hanna, D., Tumelty, L., Waldron, D., Maguire, C., Mowlds, W., ... Mulholland, C. (2016). Reliability of reports of childhood trauma in bipolar disorder: A test–retest study over 18 months. *Journal of Trauma and Dissociation*, 17(4), 511-519. DOI: 10.1080/15299732.2016.1141147

Published in:

Journal of Trauma and Dissociation

Document Version:

Peer reviewed version

Queen's University Belfast - Research Portal:

[Link to publication record in Queen's University Belfast Research Portal](#)

Publisher rights

© 2016 Taylor & Francis. This is an Accepted Manuscript of an article published by Taylor & Francis in *Journal of Trauma & Dissociation* on 02/02/2016, available online: <http://www.tandfonline.com/10.1080/15299732.2016.1141147>

General rights

Copyright for the publications made accessible via the Queen's University Belfast Research Portal is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy

The Research Portal is Queen's institutional repository that provides access to Queen's research output. Every effort has been made to ensure that content in the Research Portal does not infringe any person's rights, or applicable UK laws. If you discover content in the Research Portal that you believe breaches copyright or violates any law, please contact openaccess@qub.ac.uk.

Reliability of Reports of Childhood Trauma in Bipolar Disorder: A Test-retest Study over Eighteen Months

Ciaran Shannon, D.Clin.Psych.

School of Psychology, Queen's University Belfast, Belfast, Northern Ireland

Donncha Hanna, PhD

School of Psychology, Queen's University Belfast, Belfast, Northern Ireland

Leo Tumelty, MRCPsych

Department of Psychiatry, Western Health and Social Care Trust, Derry, Northern Ireland

Daniel Waldron, BSc

School of Psychology, Queen's University Belfast, Belfast, Northern Ireland

Chrissie Maguire, DClinPsych

School of Psychology, Queen's University Belfast, Belfast, Northern Ireland

William Mowlds, DClinPsych

School of Psychology, Queen's University Belfast, Belfast, Northern Ireland

Ciaran Meenagh, MB

Department of Psychiatry, Northern Health and Social Care Trust, Newtownabbey, Northern Ireland

Ciaran Mulholland, MD

School of Medicine, Queen's University Belfast, Belfast, Northern Ireland

Address correspondence to

Ciaran Shannon, DClinPsych, School of Psychology, Queen's University Belfast, David Keir Building, 18-30 Malone Road, Belfast, Northern Ireland, BT9 5BN. E-mail: ciaran.shannon@qub.ac.uk

Word Count: including title page, abstract, references and tables - 3921

Other Author Contact Details:

Dr Donncha Hanna

Lecturer, School of Psychology, Queen's University Belfast, David Keir Building, 18-30 Malone Road, Belfast, Northern Ireland, BT9 5BN

donncha.hanna@qub.ac.uk

Dr Leo Tumelty

Consultant Psychiatrist, Western Health and Social Care Trust, Gransha Hospital, Clooney Rd, Derry BT47 6TF

ltumelty@doctors.org.uk

Mr Daniel Waldron

C/O Dr Shannon, DClinPsych Programme, School of Psychology, Queen's University Belfast, David Keir Building, 18-30 Malone Road, Belfast, Northern Ireland, BT9 5BN

daniel.waldron85@gmail.com

Dr Chrissie Maguire

Clinical Psychologist, School of Psychology, Queen's University Belfast, David Keir Building, 18-30 Malone Road, Belfast, Northern Ireland, BT9 5BN

Chrissie.Maguire@belfasttrust.hscni.net

Dr William Mowlds

Clinical Psychologist, School of Psychology, Queen's University Belfast, David Keir Building, 18-30 Malone Road, Belfast, Northern Ireland, BT9 5BN

william.mowlds@northerntrust.hscni.net

Dr Ciaran Meenagh

Psychiatrist, Northern Health and Social Care Trust, Whiteabbey Hospital, Doagh Road, Newtownabbey, Antrim BT37 9RH

Ciaran.meenagh@northerntrust.hscni.net

Prof Ciaran Mulholland

Consultant Psychiatrist, School of medicine, Whitla Medicine Building, Queen's University Belfast 2015, University Road Belfast, BT7 1NN, Northern Ireland, UK.

c.c.mulholland@qub.ac.uk

Abstract

This study aimed to explore the reliability of self-reported trauma histories in a population with a diagnosis of Bipolar Disorder using the Childhood Trauma Questionnaire. Previous studies in other populations suggest high reliability of trauma histories over time and it was postulated that a similar high reliability would be demonstrated in this population. Thirty-nine patients with a confirmed diagnosis (DSM-IV criteria) were followed-up and re-administered the Childhood Trauma Questionnaire after 18 months. Cohen's kappa scores and intraclass correlations suggest reasonable test-retest reliability over the 18-month time period of the study for all types of childhood abuse, namely emotional, physical, sexual, and physical abuse and emotional neglect. Intraclass correlations ranged from $r = .50$ to (sexual abuse) to $r = .96$ (physical abuse). Cohen's kappas ranged from .44 (sexual abuse) to .76 (physical abuse). Retrospective reports of childhood trauma can be seen as reliable and are in keeping with results found with other mental health populations.

KEYWORDS affective disorders, reliability, childhood trauma

INTRODUCTION

Prevalence rates of childhood and/or adult traumatic experience in patients with bipolar disorder (BD) are generally reported to be high. Published prevalence rates of lifetime trauma range from 38.5% to 94.2% (Hammersley et al., 2003; Maguire, McCusker, Meenagh, Mulholland, & Shannon, 2008; Mowlds et al., 2010; Neria, Bromet, Carlson, & Naz, 2005; Neria et al., 2008). Prevalence rates of childhood sexual abuse range widely from 7.1 % to 35.8% (Hammersley et al., 2003; Leverich et al., 2002; McIntyre et al., 2008) and rates of physical abuse also vary from 8.4% to 35% (Leverich et al., 2002; McIntyre et al., 2008). Emotional abuse also appears a common form of childhood abuse reported; with prevalence rates ranging from between 25 to 43% (Garno, Goldberg, Ramirez, & Ritzler, 2005; Maguire et al., 2008; Mowlds et al., 2010). Two reviews of childhood trauma in BD have been published to date (Etain, Henry, Bellivier, Mathieu, & Leboyer, 2008; Fisher & Hosang, 2010) and one review of the impact of child sexual abuse on the course of the disorder (Maniglio, 2013).

A wide range of associations have been reported between outcomes in BD and childhood trauma. Childhood trauma is associated with an earlier age of onset of BD (Carballo et al., 2008; Garno et al., 2005; Leverich et al., 2002), an increased number of hospital admissions (Maguire et al., 2008), hallucinations (Hammersley et al., 2003), higher rates of mania (Garno et al., 2005), impulsivity (Brown & Anderson, 1991), faster cycling frequency (Leverich et al., 2002) and current inter-episode depressive mood (Maguire et al., 2008; Mowlds et al., 2010). Higher incidence rates of co-morbid mental health disorders such as anxiety, panic (Brown & Anderson, 1991), and alcohol and substance misuse (Garno et al., 2005; Leverich et al., 2002)

have been reported. There is a consistently reported relationship between suicidality and traumatic experience in BD (Fisher & Hosang, 2010).

Given this evidence it can be asserted that a history of traumatic experience is of clinical importance and it is thus of value to determine the reliability of the reporting of trauma histories among patients with a history of bipolar affective disorder. The possibility that individuals may not accurately report traumatic experiences has concerned both clinicians and researchers in the past.

Within populations with severe mental illness more generally, there is evidence that collateral histories from patients' mothers do not correspond well to self-report of adverse experience (Fisher, Bunn, Jacobs, Moran, & Bifulco, 2011) suggesting that caution should be exercised when using this method. This is particularly the case when using parental collateral histories in relation to a history of parental neglect. Reporting of trauma in young men has been shown to be unstable over time mainly due to false negatives in reporting; a tendency to underreport trauma initially is common (Fergusson, Horwood, & Woodward, 2000). Reliability in trauma reporting in a group of females with mental health problems and/or substance misuse was adequate for most items (McHugo et al., 2005; Meyer, Muenzenmaier, Cancienne & Struening, 1996). Similar high reliability was found even in populations with severe mental health problems such as schizophrenia (Fisher et al., 2009).

Within BD, the use of specific trauma questionnaires has been shown to uncover apparently robust higher rates of trauma than are found in routine clinical questioning (Shannon, Maguire, Anderson, Meenagh, & Mulholland, 2011). Clinicians frequently do not appear to be asking about traumatic histories in routine clinical practice. There may be a variety of reasons for this. Young, Read, Harrison and Barker-Collo (2001), in a survey of mental health professionals, have identified a

number of reasons why this may be the case. These include beliefs that there are more important issues to enquire about and not wanting to upset the patient and open a “Pandora’s box”. Another reason was the belief that enquiring about abuse could possibly induce false memories. This was related to the concern that response to enquiries about abuse may not be valid or reliable. While this belief about the lack of reliability and validity of reports have been increasingly countered with research in disorders such as schizophrenia (Fisher et al., 2009; Fisher et al., 2011), there is still a paucity of evidence from samples with a diagnosis of BD.

It may well be that there are added concerns about the reliability of validity of reports in BD related to the fluctuations in mood associated with the condition and the possibility that these extreme fluctuations may increase the likelihood of recall of abuse is dependent on mood state (Lewinsohn & Rosenbaum, 1987). It is therefore important to establish the reliability of trauma reports in people with a diagnosis of Bipolar Disorder specifically as well in people with other forms of types of presentations.

The aim of this study is to examine the reliability of the reports of childhood trauma in a sample of people with a diagnosis of BD using the Childhood Trauma Questionnaire (CTQ) (Bernstein & Fink, 1998).

METHOD

The present study is based in part on self-report trauma data already reported in a previous publication (Maguire et al., 2008). Ethical approval was granted by a local research ethics committee, regulated by a statutory research governance framework. Each participant gave written informed consent.

Participants

Participants were drawn from all 72 patients with a diagnosis of Bipolar Disorder attending a public mental health service in Northern Ireland. The service had a well-defined catchment area (population: 85,000). No other privately or publicly funded mental health facilities operate in the area. To be included in the study participants had to: (1) have a diagnosis that was established according to DSM-IV (American Psychiatric Association, 2000) for BD I or II by the consensus of two psychiatrists, (2) be currently attending the service, (3) be over the age of 18 years and (3) be currently considered by their mental health team as having the ability to give informed consent. Participants were excluded if: (1) they were currently experiencing a relapse of their illness (inpatient admission), (2) had a history of a moderate or severe head injury or (3) were currently reporting any severe medical conditions that interfere with their ability to attend for research appointment.

Participants ($N = 60$) ranged in age from 25 to 70 years ($M = 49.1$, $SD = 11.6$) and 34 were female and 26 were male. Further details of the sample have been published previously (Maguire et al., 2008). All self-report measures were administered in person (by CMe) and took place at the outpatient clinic in the service. The 60 participants were followed-up 18 months later and the child trauma measure was re-administered by a second author (WM).

Twenty-one participants were lost to follow-up. Nine refused consent to be re-administered the CTQ and 12 had lost contact with the service. Participants who were re-administered the CTQ ($n = 39$) ranged in age from 29 to 70 years ($M = 51.2$, $SD = 11.5$). Twenty were female and 19 were male. There were no significant differences between those who were follow-up and those who were not on any variables including gender ($\chi^2 = 1.316$; $p = .251$), age ($t = 1.043$; $p = .301$), number of

admissions ($t = 1.276$; $p = .207$) or total Childhood Trauma Questionnaire score ($t = 0.516$; $p = .608$) or any of its subscales. Only 3 of the participants had received psychological therapy prior the study and none of the participants received therapy during the 18 month follow-up period.

Measurements

The CTQ (Bernstein & Fink, 1998) is a 28-item self-report measure of childhood abuse. Five clinical subscales include emotional abuse, physical abuse, sexual abuse, emotional neglect and physical neglect each measured by 5 items. A further subscale measures minimisation and denial of trauma. Participants are asked to respond to the 28 statements on a 5-point scale from “never true” to “very often true”. Cut-off scores indicating none, mild, moderate or severe levels of abuse have been published (Bernstein, Fink, Handlesman, & Ford, 1994).

Statistical Analyses

Each of the subscales of the CTQ was subject to the most appropriate test-retest reliability analysis based on the subscale: the continuous scales were assessed utilising two-way random effects intraclass correlations with absolute agreement and the categorical scales were analysed using Cohen’s Kappa coefficients (Bartko, 1991). Intraclass coefficients were used (as in the original CTQ manual) as a measure of absolute agreement to assess reliability (as opposed to Pearson’s correlation coefficients which would be insensitive to changes in mean scores). The internal consistency of the subscales was assessed by Cronbach’s alpha.

RESULTS

Prevalence of Trauma

Table 1 summarises the prevalence of each of the subsets of trauma and percentage and number of participants falling into suggested cut-score categories at both time points (Bernstein et al., 1994). It also reports internal consistency at both time points. There were no gender differences in the prevalence or type of trauma experienced by participants.

Test-Retest Statistics

Table 2 illustrates the test-retest statistics for repeated use of the CTQ in this population. Both intraclass correlations (ICC) and Cohen's kappa are reported.

Changes Over Time In Reported Severity

Table 3 presents the numbers of and percentages of participants that fell within the same and different categories of severity at each time point. Thirteen participants (33.3%) did not change classification level in any of the five subsets of trauma. Fourteen (35.9%) changed level in one of the subsets, 6 (15.4%) changed level in 2 subsets, 5 (12.8%) changed level in 3 subsets and 1 (2.6%) changed level in 4 of the subscales. No-one changed classification level in all 5 of the subscales. So the majority of people changed classification in at least one of the subscales. Mean change for the total sample was 1.56 classifications.

Specifically there were some changes in participants who initially reported none (to minimal) abuse or neglect across the 5 subscales when they were followed up 18 months later. Two participants (5.1%) reported none (to minimal) emotional abuse at time 1 who later reported low (to moderate) emotional abuse and 1 participant (2.6%) changed from none (or minimal) at time one to reporting moderate (to severe) emotional abuse at time 2. One participant (2.6%) reported none (to minimal)

physical abuse at time 1 who later reported low (to moderate) physical abuse. Three participants (7.7%) reported none (to minimal) sexual abuse at time one who later reported low (to moderate) sexual abuse. One participant (2.6%) changed from none (or minimal) at time 1 to moderate (to severe) at time 2 and another 1 participant (2.6%) changed from none (or minimal) at time 1 to reporting severe to extreme sexual abuse at time 2. Three participants (7.7%) reported none (to minimal) emotional neglect at time one who later reported low (to moderate) emotional neglect. Three participants (7.7%) reported none (to minimal) physical neglect at time one who later reported low (to moderate) physical neglect at time 2.

Changes in the denial score were not associated with changes in any of the 5 clinical subscales between the 2 testing sessions. The denial score (which attempts to estimate underreporting of maltreatment) does not appear to have a simple relationship with changes in reports of trauma.

DISCUSSION

Rates of trauma reported were comparable to previously reported rates of trauma in BD patients already cited (Hammersley et al., 2003; Maguire et al., 2008; Mowlds et al., 2010; Neria et al., 2005; Neria et al., 2008). In addition, our inter

nal consistency scores are also similar to those reported in previous literature on the CTQ. Previous studies have reported internal consistency coefficients for the five clinical scales have been reported as ranging from .78 to .95 in adult psychiatric patients with a variety of diagnoses (Bernstein & Fink, 1998) and from .65 to .95 in a population of at risk street youth (Forde, Baron, Scher, & Stein, 2012).

Overall, the results regarding reliability are consistent with a growing literature suggests retrospective reports of childhood trauma by patients with even severe mental health conditions can be considered reasonably reliable (Fisher et al., 2009). This is the first study to focus exclusively on patients with BD. Both Landis and Koch (1977) and Fleiss (1981) have suggested interpretation guidelines for interpreting kappa scores though it is noted that these guidelines are largely arbitrary (Gwet, 2012). Using these guidelines as a reference none of the subgroups of childhood abuse in our study dropped below the level of moderate agreement using Landis and Koch's measure or adequate agreement using Fleiss' measure. The physical abuse category showed either substantial agreement or excellent agreement dependant on using Landis and Koch's or Fleiss' guideline respectively. A similar picture emerged in term of intraclass correlations. Our scores are similar or higher for all clinical subscales than those previously reported (Bernstein & Fink, 1998), with the exception of sexual abuse. With respect to sexual abuse we report an intraclass correlation of $r = .50$ and while this is still a moderate correlation, it is lower than those previously reported in a outpatients substance abuse population (Bernstein & Fink, 1998) of $r = .81$. Their testing interval ranged from 1.6 to 5.6 months ($M = 3.6$ months, $SD = 1.0$). Analysis of changes over time in reported severity again are suggestive of good reliability. Few participants change the classification level in terms of severity. Fewer again change from a category of none/minimal trauma at baseline.

The consistency of the trauma reports we have found should be noted in the light of two points. Firstly, our time points were 18 months apart. In addition, childhood trauma can be difficult for patients to disclose and a research interview, as opposed to a therapeutic relationship, maybe a particularly difficult place to make

such disclosures (Shannon et al., 2011). It is hardly surprising that given these two factors there would be some fluctuations in response. The fact that reliability remains high is an important finding.

There are, of course, limitations to our study. The sample studied was relatively small though it was a complete sample of those known to have bipolar affective disorder within the studied catchment area and who met study criteria and agreed to take part. It should be also noted that we have found reports of childhood trauma are consistent over an 18 month time period. This does not imply that reports have good validity. It possible that inaccurate reports (over-reporting or under-reporting) are consistent over these time points. Establishing the validity of reports of childhood trauma remains a research priority in many populations, including those with a diagnosis of BD.

There is considerable evidence for the impact of trauma on those with a diagnosis of bipolar disorder and it is therefore important for both clinicians and researchers. While such retrospective reports of child trauma are reasonably reliable over a lengthy time period some caution is still needed as there is evidence of some fluctuation in response.

REFERENCES

- American Psychiatric Association. (2000). *Diagnostic and Statistical Manual of Mental Disorders*. (4th ed.). Washington, DC: Author.
- Bernstein, D.P., Fink, L., Handlesman, L., & Ford, J. (1994). Initial reliability and validity of a new retrospective measure of child abuse and neglect. *American Journal of Psychiatry*, 151, 1132-1136.

- Bartko, J. J. (1991). Measurement and reliability: Statistical thinking considerations. *Schizophrenia Bulletin*, 17, 483-489.
- Bernstein, D.P., & Fink, L. (1998). *Manual for the childhood trauma questionnaire*. New York: The Psychological Corporation.
- Brown, G., & Anderson, B. (1991). Psychiatric morbidity in adult inpatients with childhood histories of sexual and physical abuse. *American Journal of Psychiatry*, 148, 55-61.
- Carballo, J.J., Harkavy-Friedman, J., Burke, A.K., Sher, L., Baca-Garcia, E., Sullivan, G., Grunebaum, M.F., Parsey, R.V., Mann, J.J., & Oquendo, M.A. (2008). Family history of suicidal behaviour and early traumatic experiences: additive effect on suicidality and course of bipolar illness. *Journal of Affective Disorders*, 109, 57-63.
- Etain, B., Henry, C., Bellivier, F., Mathieu, F., & Leboyer, M. (2008). Beyond Genetics: childhood affective trauma in bipolar disorder, *Bipolar Disorders*, 10, 867-876.
- Fergusson, D. M., Horwood, L. J., Woodward, L. J. (2000). The stability of child abuse reports: a longitudinal study of the reporting behaviour of young adults. *Psychological Medicine*, 30, 529-44.
- Fisher, H. L., Bunn, A., Jacobs, C., Moran, P., & Bifulco, A. (2011). Concordance between mother and offspring retrospective reports of childhood adversity. *Child Abuse and Neglect*, 35, 117-22.
- Fisher, H. L., Craig, T. K., Fearon, P., Morgan, K., Dazzan, P., Lappin, J., ... Morgan, C. (2009). Reliability and comparability of psychosis patients' retrospective reports of childhood abuse. *Schizophrenia Bulletin*, 37, 546-553.

- Fisher, H. L., & Hosang, G. M. (2010). Childhood Maltreatment and Bipolar Disorder: A Critical Review of the Evidence. *Mind and Brain, The Journal of Psychiatry*, 1, 75-85.
- Fleiss, J. L. (1981). *Statistical methods for rates and proportion (2nd ed.)*. New York: John Wiley.
- Forde, D. R., Baron, S. W., Scher, C. D., & Stein, M. B. (2012). Factor structure and reliability of the Childhood Trauma Questionnaire and prevalence estimates of trauma for males and female street youth. *Journal of Interpersonal Violence*, 27, 364-379.
- Garno, J. L., Goldberg, J. F., Ramirez, P. .M., & Ritzler, B. A. (2005). Impact of childhood abuse on the clinical course of bipolar illness. *British Journal of Psychiatry*, 186, 121-125.
- Gwet, K. L. (2012). *Handbook of Inter-Rater Reliability: The Definitive Guide to Measuring the Extent of Agreement Among Multiple Raters (3rd ed.)*. Gaithersburg: Advanced Analytics.
- Hammersley, P., Dias, A., Todd, G., Bowen-Jones, K., Reilly, B., & Bentall, R. (2003). Childhood Traumas and hallucinations in bipolar affective disorder: preliminary investigation. *British Journal of Psychiatry*, 182, 543-547.
- Landis, J. R., & Koch, G. G. (1977). The measurement of observer agreement for categorical data. *Biometrics*, 33, 159–174.
- Lewinsohn, P., & Rosenbaum, M. (1987). Recall of parental behaviour by acute depressives, remitted depressives and non-depressives. *Journal of Personality and Social Psychology*, 52, 611-619.

- Leverich, G. S., McElroy, S. L., Suppes, T., Keck, P. E., Denicoff, K. D., Nolen, W. ...sazx Post, R. M. (2002). Early physical and sexual abuse associated with an adverse course of bipolar illness. *Biological Psychiatry*, 51, 288-297.
- Maguire, C., McCusker, C., Meenagh, C., Mulholland, C., & Shannon, C. (2008). The effects of trauma on bipolar disorder: the mediational role of interpersonal difficulties and alcohol dependence. *Bipolar Disorders*, 10, 293-302.
- Maniglio, R. (2013). The impact of child sexual abuse on the course of bipolar disorder: a systematic review. *Bipolar Disorders*, 15, 341-358.
- McHugo, G. J., Caspi, Y., Kammerer, N., Mazelis. R., Jackson, E. W., Russell, L., ... Kimerling, R. (2005). The assessment of trauma history in women with co-occurring substance abuse and mental disorders and a history of interpersonal violence. *Journal of Behavioral Health Services and Research*, 32, 113-127.
- McIntyre, R. S., Soczynska, J. K., Mancini. D., Lam, C., Woldeyohannes, H. O., Moon, S., ... Kennedy, S. H. (2008). The relationship between childhood abuse and suicidality in adult bipolar disorder. *Violence and Victims*, 23, 361-372.
- Meyer, I., Muenzenmaier, K., Cancienne, J., & Struening, E. (1996). Reliability and validity of a measure of sexual and physical abuse histories among women with serious mental illness. *Child Abuse and Neglect*, 20, 213-219.
- Mowlds, W., Shannon, C., McCusker, C. G., Meenagh, C., Robinson, D., Wilson, A., Mulholland, C. (2010). Autobiographical memory specificity, depression and trauma in bipolar disorder. *British Journal of Clinical Psychology*, 49, 217-233.
- Neria, Y., Bromet, E. J., Carlson, G. A., & Naz, B. (2005). Assaultive trauma and illness course in psychotic bipolar disorder: findings from the Suffolk county mental health project. *Acta Psychiatrica Scandinavica*, 111, 380-383.

Neria, Y., Olfson, M., Gameroff, M. J., Wickramaratne, P., Pilowsky, D., Verdeli, H.,

... Weissman, M. M. (2008). Trauma Exposure and post traumatic stress disorder among primary care patients with bipolar spectrum disorder. *Bipolar Disorders*, 10, 503-510.

Shannon, C., Maguire, C., Anderson, J., Meenagh, C., & Mulholland, C. (2011).

Enquiring about traumatic experiences in bipolar disorder: a case note and self-report comparison. *Journal of Affective Disorders*, 133, 352-355.

Table 1. Descriptive statistics for each CTQ classifications

	Time point	None or Minimal (N)	Low to Moderate (N)	Moderate to Severe (N)	Severe to Extreme (N)	Cronbach's alpha
Emotional Abuse Classification	Time 1	64.1% (25)	15.4% (6)	5.1% (2)	15.4% (6)	.89
	Time 2	61.5% (24)	15.4% (6)	7.7% (3)	15.4% (6)	.92
Physical Abuse Classification	Time 1	74.4% (29)	2.6% (1)	7.7% (3)	15.4% (6)	.80
	Time 2	74.4% (29)	2.6% (1)	10.3% (4)	12.8% (5)	.78
Sexual Abuse Classification	Time 1	74.4% (29)	10.3% (4)	5.1% (2)	10.3% (4)	.92
	Time 2	69.2% (27)	12.8% (5)	15.4% (6)	2.6% (1)	.70
Emotional Neglect Classification	Time 1	56.4% (22)	25.6% (10)	5.1% (2)	12.8% (5)	.92
	Time 2	59% (23)	23.1% (9)	5.1% (2)	12.8% (5)	.85
Physical Neglect Classification	Time 1	64.1% (25)	10.3% (4)	15.4% (6)	10.3% (4)	.68
	Time 2	61.5% (24)	15.4% (6)	15.4% (6)	7.7% (3)	.73

Table 2. Test-retest statistics for each CTQ subscale

	Scale ICC (with 95% confidence intervals)	Classification Kappa
Emotional abuse	.92* (.95, .84)	.58
Physical abuse	.96* (.98, .93)	.76
Sexual abuse	.50* (.70, .22)	.44
Emotional Neglect	.80* (.89, .64)	.57
Physical Neglect	.83* (.90, .69)	.54
Minimization/Denial	-	.32

* indicates significance at the 0.01 level

Table 3. Changes in severity classification from time 1 to time 2

	Decreased by 2 categories -	Decreased by 1 category 10.2% (4)	Stayed in the same category 76.9% (30)	Increased by 1 category 10.2% (4)	Increased by 2 categories 2.6% (1)	Increased by 3 categories -
Emotional Abuse classification						
Physical Abuse classification	2.6% (1)	2.6% (1)	89.75 (35)	5.1% (2)	-	-
Sexual Abuse classification	2.6% (1)	12.8% (5)	74.4% (29)	5.1% (2)	2.6% (1)	2.6% (1)
Emotional Neglect classification	5.1% (2)	7.69% (3)	74.4% (29)	10.2% (4)	2.6% (1)	-
Physical Neglect classification	2.6% (1)	10.2% (4)	74.4% (29)	12.8% (5)	-	-
Denial	2.6% (1)	15.4% (6)	61.5% (24)	15.4% (6)	5.1% (2)	-